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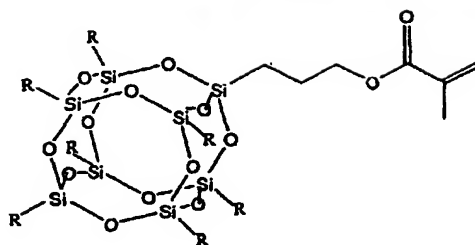
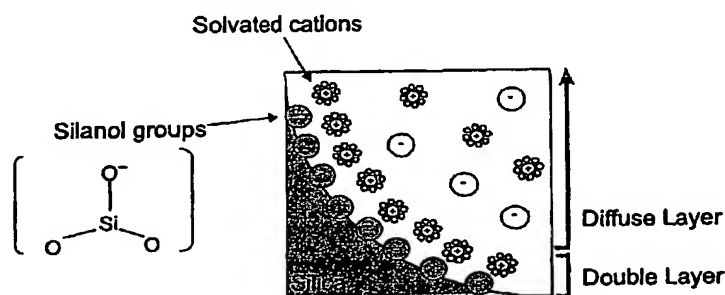
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(54) Title: HYBRID POLYMERS FOR FUNCTIONAL TUNING OF MICROFLUIDIC DEVICE SURFACES



(I)

(57) Abstract: The present invention is directed to improved microdevices and methods of manufacturing such devices. More particularly the present invention is directed to the use of a compound having the general structure (formula (I)): wherein R is selected from the group consisting of C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₈ cycloalkyl, and C₅-C₆ aryl for bonding silica based substrates to plastic substrates or to other silica based substrates. In addition the polymer can be used to coat microchannels to enhance the physical properties of the microdevice.